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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,266	08/13/2001	Brian T. Chait	01173.0003U2	9613

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NEEDLE & ROSENBERG P C  
127 PEACHTREE STREET N E  
ATLANTA, GA 30303-1811

EXAMINER

HORLICK, KENNETH R

ART UNIT PAPER NUMBER

1637

12

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/929,266

Applicant(s)

CHAIT ET AL.

Examiner

Kenneth R Horlick

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-521 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☒ Claim(s) 94 is/are allowed.
- 6) ☒ Claim(s) 8, 11-17 and 187-511 is/are rejected.
- 7) ☒ Claim(s) 32, 35-41 and 517 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 (9 pages)
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims withdrawn from consideration are 1-7,9,10,18-31,33,34,42-93,95-186,512-516 and 518-521.

1. Applicant's election with traverse of the invention as it relates to peptide reporter signals in Paper No. 11 is acknowledged. The traversal is on the ground(s) that the requirement fails to set forth the reasons why the "species" are distinct, that election of species should not be required if the species claimed would be considered unpatentable over each other, and that the requirement does not provide sufficient basis to indicate that examination of more than one of the "species" would overly burden the examiner. This is not found persuasive because the chemical nature of a given reporter signal is critical in both searching the invention and understanding the basis for which the reporter functions as a signal. As the chemical nature of peptides, nucleic acids, carbohydrates, etc. are clearly very different, it is submitted that the use of any given type of molecule as a reporter signal represents a distinct invention and therefore a distinct search. So the various types of reporter signals are distinct because of their diverse chemical structures; such diverse chemical structures indicate that the different types of reporter signals would in fact be considered patentable over one another; and the fact that the different types of chemical structures encompassed in the broad claims are differently classified is sufficient evidence of undue burden of search in considering more than one type together.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-7, 9, 10, 18-31, 33, 34, 42-93, 95-186, 512-516, and 518-521 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 11.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

4. Claims 8, 11-17, 32, 35-41, and 517 are objected to as currently depending on a claim which is withdrawn from consideration. Further, it is noted that claims 8 and 32 currently include non-elected subject matter.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. It is suggested that "using alterable peptide tags" or similar language be added to the current title.

6. Claims 8, 11-17, and 187-511 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) Claims 8 and 11-17, to the extent that they depend on withdrawn claim 1, are confusing because of the language "reporter signals can be altered", as it is unclear whether such alteration is optional or required. Amendment of the independent claim to recite "wherein the reporter signals are designed so as to be capable of being altered" would obviate this rejection.

B) Claims 187-295 are confusing because of the language "reporter signal peptides can be altered", as it is unclear whether such alteration is optional or required in these product claims. Amendment of the independent claims to recite "wherein the reporter signal peptides are designed so as to be capable of being altered" would obviate this rejection.

C) Claims 296-511 are confusing because of the language "reporter signal peptides can be altered", as it is unclear whether such alteration is optional or required in these method claims. Amendment of the independent claims to recite "wherein the reporter signal peptides are altered" would obviate this rejection.

D) Claims 233 and 415 are confusing because of the language "wherein the cells are in cell lines"; it would appear that "wherein the cells are cell lines" is intended. Clarification is required.

E) Claims 250, 252, 441, and 443 are confusing because of the language "substantially all of the cells", as it cannot be determined what amount of cells satisfies this language. Clarification is required.

F) Claims 258 and 449 are confusing because of the language "wherein the proteins or peptides of interest are related", as it cannot be determined what proteins/peptides satisfy this language. Clarification is required.

G) Claim 303 is confusing because of the language "are detecting using", which appears to be a typographical error. Clarification is required.

H) Claim 316 is confusing as it is grammatically incorrect; correction is required.

7. Claim 94 is allowable. Claims 32, 35-41, and 517 are objected to as being dependent upon a withdrawn base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 8, 11-17, and 187-511 are free of the prior art, but are rejected for other reasons (see above). Schmidt et al. (US 6,156,527), now made of record by the examiner, discloses characterization of polypeptides by fragmentation with a cleavage agent, and analyzing the cleavage fragments by mass spectrometry. Garvin (US 6,329,180), Iris et al. (US 6,403,309), and Iris et al. (WO 00/23622), made of record by the examiner, disclose peptide tags and uses thereof, wherein the peptide tags serve as affinity labels and are not altered during detection. No prior art has been found teaching or suggesting: peptide reporter signals/tags having the same mass-to-charge ratio (claim 94), nor such peptide reporter signals/tags which are designed so as to be capable of being altered, wherein alteration provides for distinguishing among the altered peptide reporter signals/tags.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R Horlick whose telephone number is 703-308-3905. The examiner can normally be reached on Monday-Thursday 6:30AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 703-308-1119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-0294 for After Final communications.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

*Kenneth R. Horlick, Ph.D.*  
Kenneth R Horlick  
Primary Examiner  
Art Unit 1637

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June 17, 2003